

WACA/WSDOT Meeting

Minutes for May 25, 2006 Meeting

Attendees:

Jim Walter, WSDOT	Kent Balcom, Headwaters	Craig Matteson, Central Pre
Jim Tobin, ACPA	Kurt Williams, WSDOT	Rob Shogren, Lafarge
Felix Chandra, Stoneway	Dick Boss, Cadman	Robert Raynes, Rinker
Bruce Chattin, WACA	Steve Ford, Miles Sand & Gr	Kurt Siegfried, Rinker
Neil Guptill, Glacier NW	John Tellvik, Degussa	Kevin Wolf, Glacier NW
Gary Albert, Martin Marietta	Keith Howard, Wilder Const.	Cathy Nicholas, FHWA
Allan Kramer, Lehigh NW	Scott Dilloreto, Degussa	Dave Heizenrader, WSDOT
Mohammad Shekhizadeh, WSDOT		

Location: WSDOT HQ Mats Lab.

Meeting Minutes:

Date for Next WACA Meetings: Thursday, October 12, 2006 at WACA's office Des Moines, 9:30 AM – 12:00 Noon

Future WACA Meetings Dates:

December 7, 2006 at WSDOT HQ Mats Lab

Issue: Fly ash shortage, WSDOT mixes CDF, 4000D and 4000P. Update on Issues:

05/25/06 – Kent Balcom with Headwaters reviewed the current information his company had on fly ash supply. Kent noted that the Boardman plant is online in Oregon, but that supply is tied to California and the Centralia plant is not expected to come back online until sometime in mid to late July. Current the Headwater's silos have approximately 6000 tons of fly ash left in them. Headwater is bringing in 2,400 tons of fly ash from North Dakota by rail. Mo handed out draft guidelines for performance specifications and asked all for comments. Bruce C. noted that with the fly ash supply exhausted we need to look long term for solutions to this issue. The group discussed the guidelines at length and noted that permeability of 1500 Coulomb is not attainable with out fly ash, but can be attained withy microsilica. Rob S noted that roughly 2000 Coulombs can be attained with straight cement with a water cement ratio of less that 0.42. Mo said he is willing to consider the use of micro silica and would like to see 1500 Coulombs, but would consider raising the 1500 Coulomb limit. Neil G. asked if the 56 days was negotiable and could it be raised to 90 days? Mo said the 56 days is negotiable and Mo also agreed that slump could be raised to 5 and ½ with admixtures. Allan K. asked if VMA' were allowed and Mo said they are. Craig M noted that the fly ash supply from Canada is intermittent and cement is used when fly ash is not available and fly ash is used when it is available. Group discussed performance mixes and Mo said WSDOT is open to alternate mix designs, but requested that test information be supplied with the

mixes. Kevin Wolfe asked if paste definition and Mo said it was by weight. (Note: After the meeting Mo corrected the paste definition to volume.)

Action Plan: Update performance specifications, WSDOT to update Std Spec's for CDF, 4000P and 4000D to allow slag, Communicate Alternate mix designs are acceptable tied to performance specifications. Update group at next WACA meeting. Headwaters, WACA, WSDOT.

Issue: Viscosity Modifying Admixture – Mo Sheikhzadeh.

05/25/06 – John Tellvik noted that the paper work for VMA's from Degussa had been submitted to the new products committee. Group briefly discussed us of SCC in precast girders and Mo noted that further testing would be required, such as bond and creep test before a decision could be made by WSDOT on allowing SCC in precast girders

Action Plan: Continue to give updates to WACA at next Meeting. – Mo S.

Issue: Shrinkage Strain – Mo Sheikhzadeh.

Issue: Cracking in bridges decks. WSDOT is seeing transverse cracks every 4 to 6 feet in bridge decks, even when the bridge decks are properly cured. Test mix has approximately 350 pounds of cement, and with fly ash the total cementitious content is 560 pounds.

05/25/06 – Mo noted that WSDOT is considering the use of combined gradation and eliminating AASHTO 67. Brief Group discussion concerning ability of all producers to use combined gradation, appeared that all producers were able to use combined gradation.

Action Plan: Continue to give updates to WACA at Monthly Meetings. – Mo S.

Issue: Slag as an alternative on 4000D and 4000P concrete mixes – Rob Shogren, Mo Sheikhzadeh & High Alumina content in slag & potential for sulfate attack – Rob Shogren, Kurt W./Jim W.

Issue: WSDOT is concerned that high alumina slag will not mitigate for sulfate attack.

05/25/06 – This issue has been tabled for now. Kurt and Rob are working on a specification that will limit the use of slag in concrete where sulfate testing on soils determines a potential for sulfate attack. Robert Raynes asked about using a Type K shrinkage compensated cement. Neil G noted that Type K is sensitive to curing. Mo asked for information on using Type K and John Tellvik said he has some information he can send

Action Plan: Continue to give updates to WACA at Monthly Meetings – Mo S.

Issue: Bituminous Surface Treatment (BST) – Jim W.

05/25/06 – Jim Walter noted that more BST's are being used in Western Washington and that the different WSDOT Regions are using different specifications. Keith H. asked if there will be a common BST specification used Statewide. Jim said he will be looking into standardizing the BST specification among the different Regions.

Action Plan: Continue to give updates to WACA at Monthly Meetings – Jim W.

Issue: Performance Specifications for Concrete Mix Designs - Mo Sheikhezadeh

Issue: Develop performance specification parameters for concrete that can be developed into specifications.

05/25/06 – This issue is tied into performance specification for concrete being developed to address the fly ash shortage and will be combined with the fly ash issue for now on future agenda's.

Plan: Combined with Fly Ash Shortage Issue.

Issue: Degradation for concrete Aggregate/Base Course – Jim Walter.

05/25/06 – Jim Walter noted that a draft degradation specification is being developed and should be available for review at the next WACA meeting. The draft will be sent for comment via email if time permits before the next WACA meeting. Group discussed types of testing that can be done on aggregate bound in concrete. Jim W. noted that WSDOT is open to suggestions from industry on a testing program and noted that WSDOT could run strength test on cylinders over a period of time, but beyond that would need a testing program outside of WSDOT. Jim noted that comparison testing is going to be done that compares test done by the Western states to compare degradation test to tests that other states are running.

Action Plan: Continue to give updates to WACA at Monthly Meetings. – Jim W.

Air in Vertical concrete – Neil Guptill.

05/25/06 – Mo noted he couldn't find any research on deleting air from vertical concrete. Neil agreed to withdraw this issue for now and will bring back to the group once research is found on this issue.

Action Plan: Issue Complete.

Soldier Pile Concrete Mix – Mo

05/25/06 – Mo handed out revisions to Section 6-16.3(5) Backfilling Shafts, and Section 6-16.3(6) Installing Timber Lagging and Permanent Ground Anchors. See the bottom of these notes for copies of the handouts. Mo noted that these revisions will go into the

Standard Specifications this August and asked for any last minute comments. If there are comments please email them to Bruce or Kurt.

Action Plan: Issue complete.

Cement – Processing Additions – Rob

05/25/06 – Rob asked about raising the amount of processing additions in ASTM C-150 cement. Rob noted that Lafarge meets the requirements of ASTM C 465. Jim W noted that WSDOT needs to know what is going into the cement as a processing addition and submit data that shows what affects if any the processing additions have on the concrete and cement.

Action Plan: Update group at next meeting – Jim W./ Rob S.

Cement Approval Process for Ship Loads of Cement – Jim W.

05/25/06 – Jim noted that he is not comfortable with putting cement brought in by the ship load onto the Qualified Products List (QPL). And cement brought in by the ship would be approved by the Request for Approval of Material (RAM) process. Jim W. also noted that the cement acceptance program will be used to place cement producers onto the QPL. Kurt asked that WSDOT be notified as soon as possible when a ship load of cement is coming in as WSDOT needs time to do testing. Bruce requested a copy of the cement approval process. (Attached to email sent out with these notes.) Kevin Wolf brought up concerns about CCRL requirement in WSDOT's Standard Practice QC-1, Standard Practice for Cement Producers that Certify Portland Cement. Kevin noted that ISO approval is more rigorous than WSDOT's program and overseas company's meet there own country's standards. Kevin was also concerned about testing each ship and wording within WSDOT's QC-1. (Kevin W. and Neil G. met with WSDOT on Tuesday, May 30, 2006 to discuss QC-1 with WSDOT. This meeting generated agreement that QC-1 will be reworded slightly in Section 5.1.6 to allow other testing programs beyond CCRL for testing programs.)

Action Plan: Update group at next meeting – Jim W./ Rob S.

Truck Scales – Gary A.

05/25/06 – Gary asked updating scale certification requirements in the Standard Specifications. Noted that his operation does not have two scales, and asked if tare weight would be allowed. Kurt asked Gary to write up draft changes to the Std Specs and this could be reviewed by WACA and WSDOT. Gary also asked about the need to have a certified weigh master stamp on load tickets. Kurt agreed to look in this further and see if this is a Std Spec requirement or if the Construction Manual may be requiring this.

Action Plan: Update group at next meeting – Gary A./Kurt W.